



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 195 341 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
05.06.2002 Bulletin 2002/23

(51) Int Cl.7: **B65H 54/28**

(43) Date of publication A2:
10.04.2002 Bulletin 2002/15

(21) Application number: **01130818.6**

(22) Date of filing: **24.02.1997**

(84) Designated Contracting States:
DE FR IT

(30) Priority: **14.03.1996 JP 8574596**
14.03.1996 JP 8593596

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
97102984.8 / 0 795 509

(71) Applicant: **Murata Kikai Kabushiki Kaisha**
Minami-ku, Kyoto-shi, Kyoto 601 (JP)

(72) Inventor: **Nakagawa, Osamu**
Sakyo-ku, Kyoto (JP)

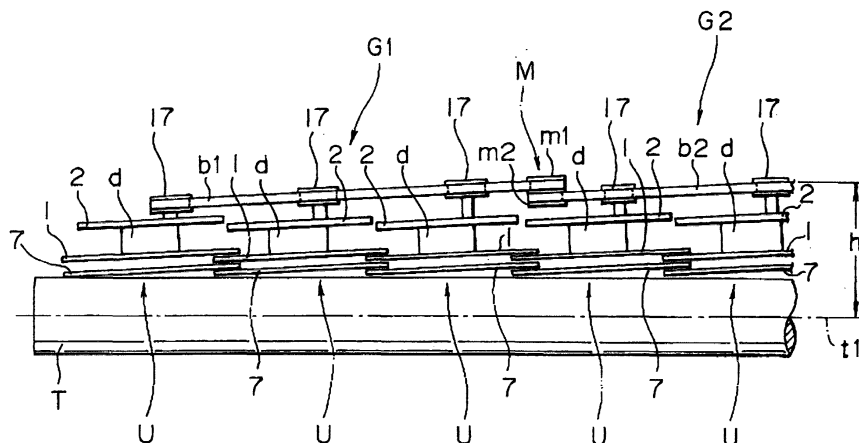
(74) Representative: **Vogeser, Werner, Dipl.-Ing. et al**
Patent- und Rechtsanwälte,
Hansmann & Vogeser,
Albert-Rosshaupter-Strasse 65
81369 München (DE)

(54) Yarn traverse device

(57) The present invention relates to a yarn traverse device for use with an automatic yarn winder having a plurality of winding units comprising a plurality of yarn traverse units (U) each having an upper rotating wing (1) and a lower rotating wing (7) which rotate in opposite directions and which are slanted with respect the axis of rotation of a touch roller (T) or a package (P), which overlap partially with the wings of adjacent traverse units (U) and the rotational centers of which are offset to each other. To reduce the overall height of the yarn traverse

device a height adjustment pulley member (M) having two pulleys (m1, m2) which rotate in unison is arranged between yarn traverse unit groups (G1, G2) comprising a plurality of yarn traverse units (U) and the yarn traverse units (U) of one yarn traverse unit group (G1) are driven by a drive belt (b1) wound on one pulley (m1) of the height adjustment pulley member (M) and the yarn traverse units (U) of the other yarn traverse unit group (G2) are driven by a drive belt (b2) wound on the other pulley (m2) of the height adjustment pulley member (M)" (Fig. 6).

FIG. 6



EP 1 195 341 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 13 0818

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	DE 44 25 133 A (NEUMAG-NEUMÜNSTERSCHE MASCHINEN- UND ANLAGENBAU GMBH) 18 January 1996 (1996-01-18) * column 1, line 55 - column 2, line 4; claims; figures *	1	B65H54/28
A	DE 43 04 055 C (NEUMAG-NEUMÜNSTERSCHE MASCHINEN- UND ANLAGENBAU GMBH) 24 March 1994 (1994-03-24)		
A	PATENT ABSTRACTS OF JAPAN vol. 017, no. 304 (M-1427), 10 June 1993 (1993-06-10) -& JP 05 024740 A (TORAY IND INC), 2 February 1993 (1993-02-02) * abstract *		
A	US 4 505 436 A (H. SCHIPPERS) 19 March 1985 (1985-03-19) * figures 8,9 *		
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 April 2002	Examiner D'Hulster, E
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 13 0818

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

11-04-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
DE 4425133	A	18-01-1996	DE 4425133 A1	18-01-1996
			AT 167455 T	15-07-1998
			CN 1152900 A ,B	25-06-1997
			DE 59502605 D1	23-07-1998
			WO 9602453 A1	01-02-1996
			EP 0771302 A1	07-05-1997
			JP 2771333 B2	02-07-1998
			JP 9507824 T	12-08-1997
			KR 246076 B1	01-04-2000
			US 5964423 A	12-10-1999
			US 5967446 A	19-10-1999
DE 4304055	C	24-03-1994	DE 4304055 C1	24-03-1994
			DE 59306337 D1	05-06-1997
			EP 0610571 A1	17-08-1994
			JP 2059686 C	10-06-1996
			JP 6298455 A	25-10-1994
			JP 7080626 B	30-08-1995
			US 5544830 A	13-08-1996
JP 05024740	A	02-02-1993	NONE	
US 4505436	A	19-03-1985	DE 3307915 A1	06-09-1984
			DE 3460151 D1	03-07-1986
			DE 3460153 D1	03-07-1986
			EP 0114641 A1	01-08-1984
			EP 0114642 A1	01-08-1984
			JP 1813887 C	18-01-1994
			JP 3072544 B	19-11-1991
			JP 59194977 A	05-11-1984
			DE 3461067 D1	04-12-1986
			EP 0120216 A1	03-10-1984
			US 4561603 A	31-12-1985